

We claim:

1. A method for papermaking comprising making paper by adding to pulp slurry a silica sol which is prepared through the reaction between an aqueous solution of sodium silicate and a mineral acid, and which has, under a SiO_2 concentration from 15 to 50 g/L wherein the value of the concentration is shown by [C], a viscosity from $0.12 \times [\text{C}]$ mPa·s to 15 mPa·s measured at 25°C , and a cationic component and/or an amphoteric component.

2. The method as claimed in claim 1, wherein the silica sol has a pH of 3 or less.

3. The method as claimed in claim 1 or 2, wherein said silica sol is produced by preparing a high concentration silica sol which has a high SiO_2 concentration [C] ranging between 100 g/L and 200 g/L, and has a viscosity from $0.06 \times [\text{C}]$ mPa·s to 30 mPa·s under the high concentration range, and diluting the high concentration silica sol.

4. The method as claimed in claim 3, wherein the high concentration silica sol has a pH of 1.3 to 3.

5. The method as claimed in claim any one of claims 1-4, wherein the silica sol is further diluted before adding to the pulp slurry.

6. A retention aid comprising a silica sol which is prepared through the reaction between an aqueous solution of sodium silicate and a mineral acid, and which has, under a SiO_2

concentration from 15 to 50 g/L wherein the value of the concentration is shown by [C], a viscosity from $0.12 \times [C]$ mPa·s to 15 mPa·s measured at 25°C.

7. The retention aid as claimed in claim 6, wherein the silica sol has a pH of 3 or less.